MAHARASHTRA ANIMAL & FISHERY SCIENCES UNIVERSITY, NAGPUR
COLLEGE OF DAIRY TECHNOLOGY, UDGIR-413 517 (LATUR)

TENDER NOTICE FOR SUPPLY OF LABORATORY EQUIPMENTS / INSTRUMENTS / MACHINERY/ FURNITURE

Tele. /Fax No: 02385-254754/253754 **Email id: cdtudgir@gmail.com**

No. AD/CDTU/Tender/ 1316/2013 **Date: 22.02.2013**

TENDER NOTICE

1. Sealed tenders are invited from the intending manufacturers /authorized dealers /authorized suppliers for the supply of Laboratory Equipments /Instruments / Machinery/ Furniture to College of Dairy Technology, Udgir, Dist. Latur.

2. The tender forms, terms and conditions, details of the specifications etc. of above items and other details governing supply will be available in the office of undersigned during office hours on all working days. Alternatively, the blank tender form can be downloaded from website **(www.mafsu.in)** and submitted to the office of the undersigned within prescribed date along with prescribed fee (non-refundable) as per **schedule 'A'** in the form of crossed demand draft of Nationalized Bank drawn in favour of **Pay & Account Officer, MAFSU, COVAS, Udgir** payable at **State Bank of India, Udgir, Dist. Latur**.

3. Tender form duly completed in all respects in sealed envelope with endorsement i.e. **'Supply of Laboratory Equipments / Instruments / MACHINERY/ Furniture'** should reach the office, addressed to : The Associate Dean, College of Dairy Technology, Udgir, Dist. Latur Pin-413 517, on or before **21/03/2013 up to 17.00 Hrs.** along with **3%** of the cost of items tendered or Rs.5000/- whichever is less as earnest money deposit (E.M.D) in the form of DD of Nationalized bank drawn in favour of **Pay & Account Officer, MAFSU, COVAS, Udgir** payable at **State Bank of India, Udgir (Dist. Latur)** branch only.

4. The tenders will be opened on **22/03/2013** in presence of intending supplier/tenderer/their representative at **11.00 Hrs.** at **College of Dairy Technology, Udgir Dist - Latur**.

5. All the rights to accept or reject whole or part of the tender without assigning any reason thereof is reserved by the undersigned.

6. A separate tender form is required for each item.

Place: CDT, Udgir, Dist. Latur
Date: 22/02/2013

Associate Dean
College of Dairy Technology,
Udgir Dist. Latur

TENDER FORM

Date of Tender form available on website: 01/03/2013 to 21/03/2013

Last date for receipt of sealed tender up to: 21/03/2013 (up to 17:00 Hrs.)

Date of pre-tender meeting: 11/03/2013 (up to 15.00 Hrs.)

Date of opening of tender: 22/03/2013 (At 11.00 Hrs..)

Cost of tender form: As per schedule 'A'

Earnest Money Deposit (E.M.D.): 3 % of the cost of item (s) or Rs.5000/- whichever is less

Place: - College of Dairy Technology, Udgir, Dist- Latur - 413 517

To
The Associate Dean,
College of Dairy Technology, Udgir,
Dist- Latur (M.S.)

Subject: Tender for purchase of Laboratory Equipments / Instrument / Machinery/ Furniture.

Sir,

In accordance with the advertisement appeared in _____ on _____March 2013 and as per terms and conditions of the tender, I am submitting herewith my tender quoting therein minimum rates for the **Laboratory Equipments / Instruments / Machinery/ Furniture** _____.

Yours sincerely,

Signature of the Tenderer with Date

WITNESS

1st
Signature _____

Name _____

Address _____

_____

_____

Tele/Fax No.:_____
Mobile No.:_____
Email id: _____

2nd
Signature _____

Name _____

Address _____

_____

_____

Tele/Fax No.:_____
Mobile No.:_____
Email id :_____

MAHARASHTRA ANIMAL AND FISHERY SCIENCES UNIVERSITY
COLLEGE OF DAIRY TECHNOLOGY, UDGIR
DIST - LATUR MAHARASHTRA - 413 517

TERMS AND CONDITIONS

1. Sealed Tender will be accepted in prescribed form only.

2. The Tender is non – transferable.

3. No tender shall be considered, if the contents are erased, illegible or overwritten. Any corrections should be scored and rewritten under the initials for the tenderer. As far as possible tender should be without any corrections. (I.T.B. clause 24)

4. The tender will be opened on **22/03/2013 at 11:00 Hrs. at College of Dairy Technology, Udgir Dist - Latur** in the presence of Bidder's representative (I.T.B. clause 22.2), who choose to attend at the time, date and place specified in the schedule of requirements. Change in the place of opening of tender, if any, will be communicated in advance. If required, at the time of opening the tender the Associate Dean or Tender Opening Committee can ask for specific documents which will have to be called for / provided at that time.

5. Tender form along with the terms & conditions will not be accepted without the cost of the tender i.e. as per Schedule 'A' for each item in the form of Demand Draft of a Nationalized Bank.

6. **A Separate Tender Form is required for each item.**

7. The College has adopted two envelop system superscripted thereon as **'ENVELOP A**: **TECHNICAL BID**" & "ENVELOP B : **FINANCIAL BID**" which should be kept in a larger sealed packet / envelope. **The larger outer cover should indicate Tender Number, Name of the item and opening date on the top of the right hand corner**. The technical details in Envelop 'A' will be opened on **22.03.2013 at 11.00 Hrs.** at first instance. A competent committee will evaluate the same. If the technical specifications are as per the tendered specifications, tender will be accepted. Otherwise, in case where the technical details (Envelop 'A') fails to meet the requirements, the Financial details (Envelop 'B') will not be opened and the tender will be rejected. At the Second stage, financial details of only technically accepted offers shall be opened for further evaluation and ranking before awarding the contract.

8. Each tender should be accompanied by **earnest money equivalent to 3 % of the cost of item tendered or Rs. 5000/- whichever is less** in term of Demand Draft of Nationalized bank. This Earnest Money will be accepted in the form of Demand Draft and in the name of "**Pay & Account Officer, MAFSU, COVAS, Udgir, payable at State bank of India, Udgir Dist Latur". No tender will be considered without earnest money deposit. Conditional tender will not be accepted.**

9. The Earnest Money deposited by the tenderer shall remain in the safe custody of the Associate Dean, College of Dairy Technology, Udgir, until the acceptance of the tender is made known to the tenderer and in case, his tender is accepted until the tenderer signs the contract and gives the necessary security deposit as per condition below.

10. The intending supplier shall also have to mention the name of manufacture /make, model of the article and has to enclose the pamphlets / pictures /information brochures of the appliances for which the rates are quoted. In the absence of the above, the items offered may not be considered. The preference will be given to (a) Manufacturer, (b) Authorized Dealers of manufacturer or (c) authorized suppliers. Such agencies must enclose adequate documents to prove their claims. The preference will be given to the items bearing ISI/ISO 9000 quality control mark for the laboratory Equipments / Instruments / Machinery/ Furniture.

11. The price quoted should be inclusive of all duties such as excise duty, custom duty (Custom duty exemption certificate will be provided by the institute), surcharges, if any, which a tenderer is required to pay to the manufacturers, should also be included in the price. The tenderer may give break-up of the above.

12. Successful tenderer will have to furnish **security deposit to the extent of 3% of total cost of the items** accepted by the College authority as offered in the tender either in cash or through demand draft drawn on SBI, Udgir branch in favour of the **Pay & Accounts Officer, MAFSU, COVAS, Udgir.**

The successful tenderer should have to pay the security deposit immediately, failing which his earnest money deposit is liable to be forfeited and he shall cease to be a successful tenderer. Thereafter, the Associate Dean shall be free to enter into contract with any other tenderer.

13. All the Laboratory Equipments / Instruments / Machinery/ Furniture must be of the best quality, sound and / or as per the detail specifications and subject to the approval of the Associate Dean, College of Dairy Technology, Udgir.

14. The Tenders as furnished should remain open and should **be valid till one year from the date of opening of tender.**

15. Contract agreement form must be gone through before tender contract agreement and terms and conditions of tender are available for inspection at the office of the Associate Dean, College of Dairy Technology, Udgir.

The copies of the same can be obtained from the, Office of the Associate Dean on any working day except 2nd & 4th Saturday between 11.00 to 15.00 Hrs. (lunch time 13.30 to 14.00 Hrs) and is also available on the website (www.mafsu.in).

16. Any infringement of the terms and conditions of the Contract will make the tenderer liable for cancellation and further any earnest money or security deposit paid will be forfeited by the Associate Dean, College of Dairy Technology, Udgir.

17. The amount of earnest money deposited by the tenderer will be refunded in due course of time.

18. Tenderer will not be allowed to withdraw his tender after opening the same without forfeiting his earnest money deposited.

19. The rates quoted for providing security services should be inclusive of all statutory liabilities and this should be clearly mentioned in the tender.

20. The college authority reserves the full rights to open/consider the second envelop (B) only if the college authority is satisfied with information contained in envelope (A). The decision of the college authority regarding this will be final and shall be binding on tenderer.

21. The security deposit of the tenderer shall be returned to him / her only on the completion of the contract and on their furnishing the usual demand certificate, subject to the clearance of all outstanding dues, issues or points of dispute to the satisfaction of the Associate Dean. **(GCC sub-clause 7.6)**

22. The tender will be opened on **22.03.2013 at 11.00 Hrs. at College of Dairy Technology, Udgir** in presence of tenderer or his representatives (I.T.B sub-clause 22.2). If required, at the time of opening the tender, The Associate Dean or Tender Opening Committee can ask for specific documents which will have to be called for / provided at that time.

23. The goods should be dispatched at suppliers risk; however, the supplier will be responsible until the entire items are supplied in good condition at the destination.(GCC clause 11 - 13)

24. It is within the discretion of the concerned college/ University authorities to increase or decrease the items/quantity to be purchased and/ or to relax the conditions/specifications in exceptional circumstances.

25. Installation/fitting and demonstration of Equipments / Instruments / Machinery/ Furniture with satisfactory performance should be given before the payment is made to the supplier. Payment will be made after satisfactory report is received from the concerned Users / Scientist / Officer In charge.

26. Undersigned reserves right to accept or reject supplies in full or in part which do not strictly stick up to the specifications or to accept the materials supplied with slight variations in specifications or with a condition that the rates accepted shall be reduced at such rates as the competent authority of the College may deem fit, looking to variations and such rates shall be binding on the tenderer.

27. College authority reserves the right to accept or reject - higher version of equipment/instrument etc. or any other items under the same terms and conditions quoted by tenderer.

28. The credit bill / invoice should be presented in triplicate in the name of **'Associate Dean, College of Dairy Technology, Udgir , Dist. Latur'** after receiving the supply order. The College authority will not be liable for any delay in payment of bill(s). Payment for goods supplied will be effected preferably through e-payment or through cheque only.

29. Before signing the agreement bond the tenderer will have to produce Income Tax Clearance certificate (ITCC).

30. Even though the tender is technically accepted but after receiving of the said Equipments / Instruments / Machinery/ Furniture etc., if it is found that the technical specifications given in the tender document do not match with supplied equipment, the Associate Dean reserves the right to reject the purchase order and the purchase order will be given to the next tenderer.

31. The Associate Dean, College of Dairy Technology, Udgir reserves the right to accept or reject any or all the tenders without assigning any reason thereof.

32. Delivery period quoted should be firm & supply to be made accordingly.

33. All the disputes whatsoever in connection with the tender notice etc. shall be subject to the jurisdiction of Udgir Court.

34. The Documents / Papers such as Part I (Schedule of requirement), Part – II (Questionnaire), Part – III (Manufacturers authorization Form), Part-IV (Bid Form & price schedule), Declaration-I & declaration – II needs to be submitted along with Technical Bid.(I.T.B. clause 4)

35. The firm quoting for the above mentioned Laboratory Equipments / Instruments / Machinery / Furniture should have past experience of having supplied and installed the similar equipment to any reputed Govt Institution /Food Technology College /Dairy Technology college /Agriculture college /Vet. College etc.

36. The firm shall give successful demonstration of the equipments at CDT, Udgir.

37. The firm will arrange to impart training / familiarization in operating the equipment & instruments.

38. The terms and conditions herein contained shall form part of and shall take effects as if they were included in the contract agreement to be entered into by a successful tenderer.

Technical Bid (Envelop-A):

1. Technical Bid consisting of all technical details along with commercial terms & conditions.

2. Product Literature / leaflets consists of detailed description of goods essential technical and performance characteristics.

3. Bid Security (EMD) in the form of A/c payee DD or Bank Guarantee of a Nationalised Bank.

4. Manufacturer's Authorization Certificate in case the bidder is quoting as an agent on behalf of a manufacturer. (Self attested with stamp)

5. The Authorized Agent / Dealer should have facility of the after sales service, repairing of the equipment plant, machinery at the site / shop.

6. Certified copy of PAN / TAN / ITCC issued by Income Tax Department.

7. Documents showing capability to carry out supplier's maintenance, repair & spare parts stocking obligations.

8. Certified copy of Sales Tax / CST clearance certificate.

9. Users list along with their contact Nos, detailed address and photocopies of the P.O. (Purchase Order/ Supply order) received for the said item during last five years.

10. A clause-by-clause commentary on the purchaser Technical specification.

11. Certificate regarding enlistment of Indian Agents with the Central Purchase Organization (e.g. DGS & D) if the Indian agent desires to quote directly on behalf of their foreign principles.

Financial Bid (Envelop-B):

1. Price schedule duly completed should be enclosed with bidding documents. Financial bid indicating price for the item mentioned in the Technical Bid.

2. Prices: Be quoted on FOR College of Dairy Technology, Udgir Dist – Latur Maharashtra 413 517. **Prices shall be quoted in Indian Rupees** otherwise it shall be treated as non-responsive and rejected. Rates quoted should include all duties such as Customs (Custom duty exemption certificate will be provided) & Excise, C.S.T., S.T., G.T. should be shown separately as "C.S.T., S.T., G.T., EXTRA" wherever applicable. **Tenderer should quote their sales tax registration number.**

3. Warranty of the equipment should be for at least 24 months.

4. Cost of Annual Maintenance Charge (AMC) for next 3 years after expiry of warranty period.

5. Prices should be valid till 21th March 2014 (One year from the date of opening tender).

PART – 1: Schedule of Requirements

Sr. No.	Brief Description of Item	Accounting Unit	Quantity	Delivery Schedule

Amount of Bid Security of Rs……., in the form of DD of a Nationalised Bank drawn in favour of **"Pay & Account Officer, MAFSU, COVAS, Udgir"** or in the form of Bank Guarantee in the enclosed form be submitted with the tender document.

1. Inspection and Tests:-
   (i) Certificate showing country of origin_____
   (ii) Test certificate / inspection certificate with date, name of Issuing Agency content of specifications (To be filled by bidder)

2. Insurance: Rates should be quoted FOR destination (College of Dairy Technology, Udgir Dist – Latur Maharashtra 413 517). Insurance shall be arranged by the tenderer / contractor.

3. Warranty: Minimum 24 months from the date of installation of the Laboratory Equipment/ Instruments / Machinery/ Furniture Etc.

4. Installation: As per purchase order clause, failing which Liquidated Damage clause shall apply.(GCC clause 23)

5. Prices: Be quoted on **FOR** College of Dairy Technology, Udgir, Dist – Latur Maharashtra 413 517. **Prices shall be quoted in Indian Rupees** otherwise it shall be treated as non-responsive and rejected.

6. A) Taxes and duties:- A Foreign Supplier shall be entirely responsible for payment of all taxes, Stamp duties license fees & other levies imported outside India and within India in case of local supplier. The supplier may charge full Sale Tax / VAT etc as no form 'C' or 'D' will be issued by the Institute for availing concessional rate of S.T. etc. However, the Institute will issue Custom Duty Exemption Certificate for the imported stores being a research Institute.

   B) Rates quoted should include all duties such as Customs & Excise, C.S.T., S.T., G.T. should be shown separately as "C.S.T., S.T., G.T., EXTRA" wherever applicable. Tenderers should quote their sales tax registration number.

PART – 2: Questionnaire

Bidders should furnish specific answers to all the questions given below. In case a question does not apply to a bidder, the same may please note that if the answers so furnished are not clear and / or are evasive, the bid is liable to be ignored.

1. Bid Ref. No. _____ Date for bid opening on_____

2. Offer is open for acceptance:_____

3. Brand of goods offered:_____

4. Name & address of manufacturer:_____

5. Station of Manufacturer:_____

6. Permanent Income Tax A/C No.:_____

7. Confirm whether you have attached your latest / current ITCC or certified photocopy thereof. _____

8. Status:

(a) Are you currently registered with the Directorate General of supplies & Disposals (DGS&D) for the items(s) quoted? If so, indicate the date up to which you are registered and whether there is any monetary limit on your registration. _____ _____ _____ _____

(b) Are you a small scale unit currently registered with the National Small Industries Corporation (NSIC) UNDER Single Point Registration Scheme for the item(s) quoted? If so, indicate the date up to which you are registered and whether there is any monetary limit on your registration. _____ _____ _____

(c) If you are not registered either with NSIC or DGS & D, please state whether you are currently registered with Directorate of Industries of the State Government concerned. If so, indicate the date up to which you are registered and whether there is any monetary limit on your registration. _____ _____ _____

(d) Are you registered under the Indian Companies Act 1956 or any other Act?

_____

Please attach certified copy (copies) of the relevant registration certificate(s) in confirmation to your above answer(s).

9. Please indicate:

Name & full address of your Banker (s):_____
_____

10. Whether you are

(i) Manufacturer of the item(s) quoted; or_____

(ii) Manufacturer's authorized agent for those items (s):_____

11. State whether business dealings with you have been currently banned by any Ministry / Dept. Of Central Govt. or any State Govt._____
_____

Signature of Witness
Name & address of Witness

Signature of Bidder
Full name, designation & Address of the person signing above For and on behalf of Messrs.
(Name & address of the bidding firm)

PART – 3: Manufacturer's Authorization Form

To
The Associate Dean,
College of Dairy Technology,
Udgir,
Dist - Latur (M.S.)

Ref: Your Bidding Documents Ref. No……..

Dear Sir,

We wish……who are established and reputable manufactures of ……(name and description of the goods offered in the bid) having factories at ……hereby authorize M/s …….....
(Name and address of the agent) to submit a bid, negotiate (as and if necessary) and conclude the contract with you against your above mentioned Bidding Documents for the above goods manufactured by us.

No company or firm or individual other than M/s……(name and address of the above agent) is authorized to bid, negotiate and conclude the contract against this specific Bidding Documents for the above mentioned goods manufactured by us.

We hereby extend our full guarantee and warranty of the General Conditions of Contract, read with modification, if any, in the Special Conditions of Contract for the goods and services offered for supply against this Bidding Document by the above firm.

Yours faithfully,

(Signature, name and designation)
For and on behalf of
M/s……
(Name & address of the manufactures)

PART – 4: Bid Form and Prices Schedules

Date: ……..

To
The Associate Dean,
College of Dairy Technology,
Udgir, Dist - Latur (M.S.)

Ref: Your bidding documents Ref. No. ……..Dated: ……..

Having examined the above mentioned bidding documents, including agenda Nos. (if any), the receipt of which is hereby duly acknowledge, we the undersigned, offer to supply and deliver……. (description of goods and services) in conformity with the said bidding documents for the sum as shown in the price schedules, attached herewith and made part of this bid.

We undertake, if our bid is accepted, to deliver the goods and complete the services in accordance with the delivery schedule specified in the schedule of Requirements after fulfilling all the applicable requirements incorporated in the above referred bidding documents.

If our bid is accepted, we will provide you with performance security as per the instructions specified in GCC clause 7 and in a form acceptable to you in terms of GCC clause 7.5 for a sum equivalent to 10% (ten per cent) of the contract price for the due performance of the contract.

We agree to abide by this bid for the bid validity period specified in the ITB clause 15 (read with modification, if any, in the Bid Data Sheet) or for the subsequently extended period, if any agreed to by us and it shall remain binding up on us and may be accepted at any time before the expiration of that period.

Until a formal contract is prepared and executed, this old bid together with your written acceptance thereof and your notification of award, shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive.

Dated this…….day of …….2013.

Signature
(in the capacity of)
Duly authorized to sign bid for and on behalf of

DECLARATION – I

(The following declarations shall be made herein by the tenderer)

I) Associate Dean, College of Dairy Technology, Udgir, may re-scind all contracts by two weeks notice to me / us writing:

a) If I / We assign or subject my/our contract without their approval or if I / We attempt to do so.

b) If I / We decline, neglect or delay to comply with any demand or requisition or in any other was fails to perform or observe any condition of the contract or am/ are in the opinion of the Associate Dean, College of Dairy Technology, Udgir, which shall be final not likely to carry out contract satisfactorily.

c) If I / We or any of my / our partner become insolvent or apply for relief as an insolvent, debtor(s) or make any composition with my / our creditors or attempt to do so.

d) If I / We or any of my / our agents or servants shall

i) be guilty of fraud in respect of the contract, or any other contract entered into by me / us with the Associate Dean, College of Dairy Technology, Udgir or

ii) directly or indirectly given promise or offer any kind of bribe gratuity gift, loan requisite, reward of advantage pecuniary or otherwise to any officer or person in the employment of the Govt. in any way relating to such officer's or persons in office or employment or attempt to do so.

e) If any such officer or persons nominated in Clause become in any way directly or indirectly interested in the contract.

f) In case of such rescission / my / our security deposit, with (Associate Dean, College of Dairy Technology, Udgir) shall stand forfeited.

Date: **(Signature with seal)**

(Name of signatory in block letter)

DECLARATION – II

(The following declarations shall be made herein by the tenderer)

1) I / We hereby declare that the terms and conditions of this tender and that contract agreement form have been seen and read by me / us (or read translated and explained to me / us) and I/We accept the said terms and conditions as mentioned in tender.

2) I / We hereby bind myself / ourselves to the Associate Dean, College of Dairy Technology, Udgir for any on behalf of the **Maharashtra Animal and Fisheries Science University, Nagpur** to provide during the period under contract, the security services at their own rates tendered herewith by me/us.

3) The Associate Dean, College of Dairy Technology, Udgir reserves the rights to add, alter and delete any of the condition mentioned in this document.

4) The Associate Dean, College of Dairy Technology, Udgir reserves the rights to reject the lowest or any or all tenders without assigning any reason what so ever.

5) The Associate Dean, College of Dairy Technology, Udgir will not be responsible for delay or non receipt of tender during transit by post.

(Signature with seal)
Name of the signatory in Block Letters

Address :
Email Address :
Telephone No. :
Sales Tax Registration No.

NOTE:

1) The signatory of the declaration above and of the tender must be duly authorized by the Executive of the firm or company on whose behalf he may acting and must indicate his official designation.

2) The terms and conditions of tender as laid down above are without prejudice to and exclusive of such additional once or such features as may be indicated in the tender form itself.

3) The terms and conditions with the signed declaration by the tenderer or must be returned intact with the tender, duly filled in by him, in a sealed cover to the Associate Dean, College of Dairy Technology, Udgir.

PART 5: Bank guarantee form for bid security

Whereas…….. (name of bidder) (hereinafter called" the bidder") has submitted his bid dated……..(date) for the supply of…… (brief description of the relevant item(s) and services) (hereinafter called "the bid").

KNOW ALL PEOPLE by these presents that WE …… (name of the bank) having registered office at …….. (full address) (hereinafter called "the bank") are bound in to……(name of the purchaser (hereinafter called " the purchaser") in the sum of …….. (amount in figures and in words) for which payment well and truly to be, made to the said purchaser, the bank binds itself, its successors and assigns by these presents.

Sealed with the Common Seal of the said bank this……. Day of……..200…..

THE CONDITIONS of these obligations are:

1. If the bidder
   (i) Withdraws its bid during the period of bid validity specified by the bidder on the bid form; or
   (ii) Does not accept the correction of errors in accordance with the instruction to Bidders

OR

2. If the bidder, having been notified of the acceptance of its bid by the purchaser during the period of bid validity:
   (i) fails or refuses to execute the contract form, if required: or
   (ii) fails or refuses to furnish the performance security, in accordance with the instructions to Bidders:

We undertake to pay to the purchaser up to the above amount upon receipt of its first written demand, without the purchaser having to substantiate its demand, provided that in its demand the purchaser will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the above mentioned two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including 60 (sixty) days after the period of bid validity and any demand in respect thereof should reach the bank not later than the above date.

Date…….. Signature of the Bank Authority.

Place…….. SEAL of the Bank

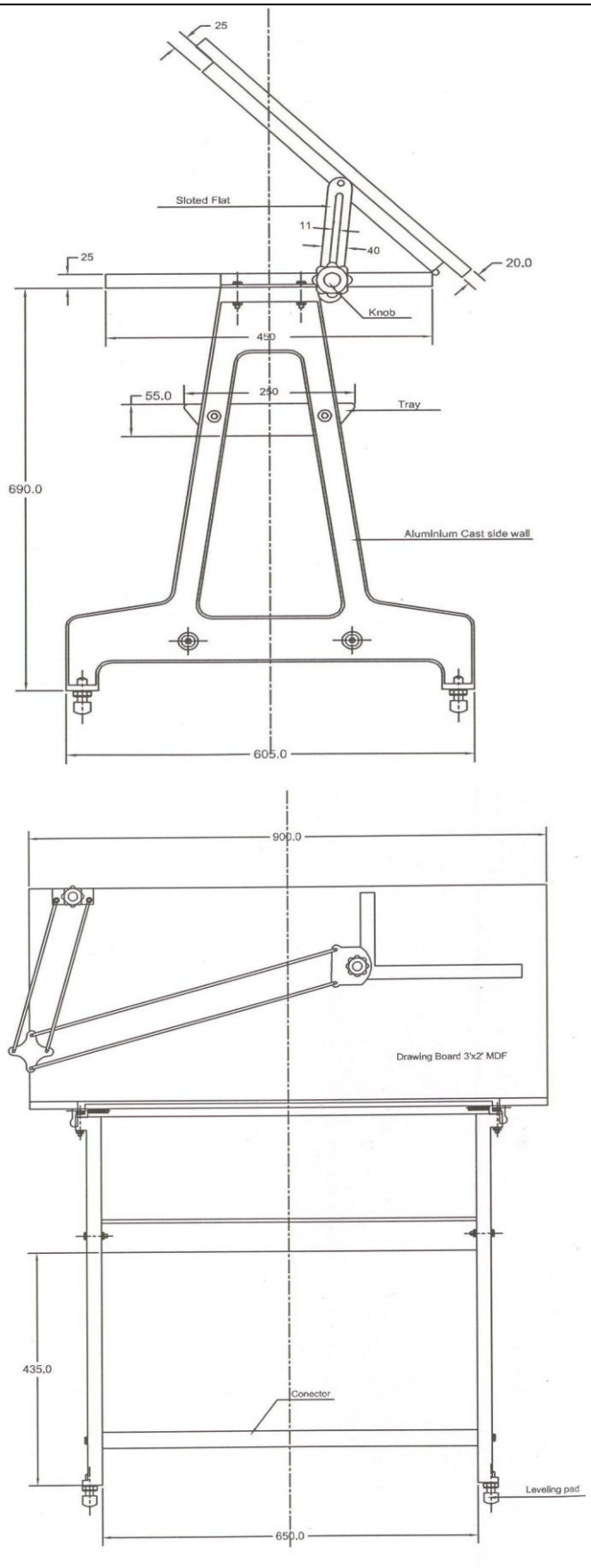
Schedule 'A'
Rates of Blank Tender Form (Non refundable)

Sr. No.	Estimated cost of Item (Rs.)	Rates of blank tender (Rs.)
1	Up to Rs.50,000	10/-
2	50,000 to 1 Lakh	250/-
3	1 Lakh to 2 Lakh	500/-
4	2 Lakh to 5 Lakh	750/-
5	5 Lakh to 10 Lakh	1000/-
6	10 Lakh & above	2000/-

For specifications and list of equipment & instrument, please refer our website- www.mafsu.in

Specifications for Laboratory Equipments/ Instruments/ Machinery/ Furniture.

Item No.	Items to be supplied	Specifications	Qty	Make
01	Standard Drawing Table	1. Table should have 0° to 45° adjustable drawing board. 2. Table top constructed of sturdy MDF board and can be adjusted tilting drawing board to most comfortable for students up to 0° to 45°. 3. Table should consist of Sturdy aluminium casting side walls. 4. The product should be rigid, stable structure made by heavy aluminium casting side walls. 5. Table should have 18 gauge CRC INSTRUMENT tray. 6. Table should have adjustable levelling high quality rubber pads. 7. The board angle adjusting knob should be of high quality, sturdy and unbreakable. 8. 'V' shaped 2mm pencil tray. 9. Two coat of **Asian Paint** primer. 10. Two coat of **Asian Paint** as per your requirements colure shade. **OR** 11. Required powder coating should be provided. 12. High tensile **Unbreakable** fasteners. 13. **Dimension :** A. Tabletop Length = 36" (90cm) B. Tabletop Width = 24" (60cm) C. Table Height = 30" (75cm) D. Base Length = 30" (75cm) E. Base Width = 24" (60cm) G. Bag trey = 10" _ 26" _ 3" 14. Drawing board table should be as per outline/ diagram shown below:	**20**	


25
Sloted Flat
11
40
25
20.0
Knob
450
55.0
250
Tray
690.0
Aluminium Cast side wall
605.0
900.0
Drawing Board 3'x2' MDF
435.0
Conector
Leveling pad
650.0

02	Welding Machine	1. Require an inverter TIG (Tungsten Inert Gas)/ MMA (Manual Metal Arc) welding machines argon gas cylinder 2. The machine should be capable to withstand Indian power supply conditions 3. Should be based on Advanced IGBT Inverter technology to convert voltage and current levels up or down. 4. Should have advantage of power saving, better power factor, small & compact size, light weight and portability. 5. Should give spatter free smooth arc 6. Should be suitable for up-to 2 mm sheet 7. Should supply wide supply voltage range 8. Should have arrangement of adjusting pulse frequency 9. The machine should be well-suited for welding mild steel(MS), stainless steel(SS), copper & titanium 10. Supply - 180-260 VOLT 11. Phase – single phase 12. Frequency - 50-60 Hz 13. KVA/KW - 5.5/3.2 14. Min. Current – 10 A 15. Max. Current – 200 A 16. Accessories: - TIG torch, 3 meter welding cable with holder, 2 meter earth cable with clamp.	**01**	
03	PLATE HEAT EXCHANGER:	1. The exchanger/apparatus should be designed to calculate the heat transfer coefficient experimentally 2. Total No. of Plates – 10 3. Plate should be of - Stainless steel: GR 316 (All the plates should be standard make such as Alfa Laval make.) 4. Height of plate : 480 mm. approx. 5. Breadth of plate: 180 mm. approx. 6. Geyser : of suitable capacity for Hot water circulation. 7. The circulation of water is in cross flow. 8. No. of thermocouples for temperature indication at different suitable position: 4 Nos. 9. Stop Clock : 1 No. 10. Measuring Flask 1 liter capacity. 11. Suitable frame stand arrangement made of M.S. Material with Powder coating. 12. Maximum working Temp. of water 80^0C.	**01**	

		13. Fluid used for circulation is water. 14. Heat exchanger should be compatible with an electric supply of 230 V., 15 amp. Regulated , A.C. supply. 15. A user manual explaining the detail arrangement of different components of heat exchanger along with their capacity and experimental procedure should be provided.		
04	SHELL AND TUBE HEAT EXCHANGER	1. Require a two pass shell & tube heat exchanger so that hot water passage to one end of shell through the tubes and the cold water admitted at the bottom of shell should pass over the hot water tubes 2. Control valves should be provided to control the flow rates of hot & cold water & there should an arrangement to measure flow rate. 3. The shell & geysers should be mounted over a rigid frame 4. Shell should be of: a) Material : M.S. b) Inner dia.: about 200 mm. Approx. c) Thickness: about 3 mm. Approx. d) Length : 600 mm. Approx. 5. Baffles : 4 Nos. (75%) 6. Tubes should be of : a) Material: Copper. b) Inner Diameter: 14 mm.Approx. c) Outer Diameter: 16 mm. Approx. d) Length of Tubes: 500 mm. approx. 7. Thermocouples (Digital Temp. Indicator) should be provided at suitable location. 4 Nos. 8. Geyser for Hot Water: 2 Nos. 9. An Instruction/user Manual shall be supplied with the apparatus containing the	**01**	

		details of apparatus & experimental procedure, sequence of calculation to get result of experiments samples calculations.		
05	Autoclave/ Steam Sterilizer	1. It should have a LCD display 2. Safe water draining facility 3. Door protection locking system to prevent cycle from starting. 4. Pressure safety valve 5. Chamber volume Around 16 litres 6. Chamber size appro. Φ 230 mm X 360 mm 7. Sterilization temperature 121^{O}C/ 134^{O}C 8. Capacity of distilled water tank :- approx. 2.5 L (Max water level) 9. Functioning temperature should be 5-40 ^{O}C 10. Relative humidity should be max. 80% (non-condensing type) 11. Atmospheric pressure in the chamber 76 kPa – 106 kPa 12. Compatible with voltage of AC 220-240V 13. Autoclave should not weigh around 50 Kg	**01**	
06	Vaccum Packaging Machine	1. Chamber size: 460x350x80mm 2. Vaccum pump: 150-175 LPM 3. Digital Electronic control 4. Stainless steel body 5. Transparent lid 6. Sealing Bar: 1	**01**	
07	**A.** Weighing Balance	1. Readability 0.0001g 2. Capacity up to 250g 3. Response time -2-3 seconds 4. Pan size- Φ 90mm -100 mm	**01**	
08	**B.** High capacity Weighing Balance	1. Capacity up to 15 KG 2. Readability 1g 3. Response time – 2-3 seconds 4. Pan size –40 cm X 45 cm	**01**	